

## CLAIMS

1. A method for measuring an environmental biological allergen(s), characterized by measuring said biological allergen(s) by measuring protease activity of said allergen(s).
- 5 2. The method according to claim 1 or 2, wherein said allergen(s) is(are) mite and/or a material(s) originated from mite, and/or pollen.
3. The method according to claim 2, wherein said pollen is cedar pollen.
4. The method according to any one of claims 1 to 3, by which an allergen(s) in atmosphere, room air, floor(s), wall(s), window(s), window frame(s), floor  
10 covering(s), bedding(s), fiber product(s), furnitures, dust and/or house dust is(are) measured.
5. The method according to any one of claims 1 to 4, wherein substrate of the enzyme, used for the measurement of the enzyme activity is a substrate which brings about fluorescence emission or change in absorption as a result of the enzyme  
15 reaction.
6. The method according to any one of claims 1 to 5, wherein said allergen(s) in a test material(s) is(are) brought into contact with the substrate of said enzyme without a pretreatment.
7. The method according to claim 6, wherein said substrate is carried on a  
20 support, and the test material(s) is(are) brought into contact with said support.
8. The method according to claim 6, wherein said support is a porous support.
9. An instrument for measuring a biological allergen(s), comprising a porous support and a substrate of a protease, which substrate is used for measuring protease activity of said allergen(s), and which substrate is carried on said porous support, said  
25 substrate being one which brings about fluorescence emission or change in absorption as a result of the enzyme reaction.
10. The instrument according to claim 9, wherein said allergen(s) is(are) mite

and/or a material(s) originated from mite, and/or pollen.

11. A measuring apparatus for measuring an environmental biological allergen(s), comprising said instrument according to claim 9 and 10, and an optical measuring device which measures fluorescence or the change in absorbance of said porous support.

12. The measuring apparatus according to claim 11, further comprising a guide which guides a test material(s) to said instrument.

13. A measuring apparatus for measuring an environmental biological allergen(s), comprising a vessel containing solution of substrate of protease, which substrate is used for the measurement of the protease activity of said allergen(s); and optical measuring device which measures fluorescence or the change in absorbance of said solution; said substrate being one which brings about fluorescence emission or change in absorption as a result of the enzyme reaction.

14. The measuring apparatus according to claim 13, further comprising a guide which guides a test material(s) to said instrument.

15. The measuring apparatus according to claim 14, wherein said allergen(s) to be measured is(are) guided to a buffer contained in a buffer vessel; and said buffer is guided to said solution.

16. A measuring apparatus for measuring an environmental biological allergen(s), comprising a vessel containing substrate of protease, which substrate is used for measuring protease activity of said allergen(s); and an optical measuring device which measures fluorescence or the change in absorbance of the solution; said substrate being one which brings about fluorescence emission or change in absorption as a result of the enzyme reaction.

17. The measuring apparatus according to claim 16, wherein said allergen(s) to be measured is(are) guided to a buffer contained in a buffer vessel; and said buffer is guided to said solution.

18. The method according to claim 5, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) and/or oligopeptide(s) being bound to one or more of said at least one amino group through an amide bond(s).

5 19. The method according to claim 18, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) being bound to one or more of said at least one amino group through an amide bond(s).

10 20. The method according to claim 18 or 19, wherein said pigment is cresyl violet, Safranin O or methylene violet 3RAX.

21. The instrument according to claim 9, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) and/or an oligopeptide(s) being bound to one or more of said at least one amino group through an amide bond(s).

15 22. The instrument according to claim 21, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) being bound to one or more of said at least one amino group through an amide bond(s).

20 23. The instrument according to claim 21 or 22, wherein said pigment is cresyl violet, Safranin O or methylene violet 3RAX.

24. The measuring apparatus according to any one of claims 9 to 17, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) and/or an oligopeptide(s) being bound to one or more of said at least one amino group through an amide bond(s).

25 25. The measuring apparatus according to claim 24, wherein said substrate is a colored compound which is a pigment having at least one amino group, an amino acid(s) being bound to one or more of said at least one amino group through an amide

bond(s).

26. The measuring apparatus according to claim 18 or 19, wherein said pigment is cresyl violet, Safranin O or methylene violet 3RAX.